

21st CENTURY INFRASTRUCTURE COMMISSION REPORT

7.7 EMBRACING NEW TECHNOLOGY TO DEVELOP 21ST CENTURY UTILITIES

Where is Michigan today?

Most of Michigan's drinking water and wastewater management systems were built between 50 and 100 years ago and utilize outdated technology and approaches for treatment, distribution, and collection.

Many government procurement specifications and policies do not include mechanisms to evaluate and utilize new technologies or alternative materials that can provide cost savings and enhance environmental outcomes. Regulatory policies can discourage innovation because permitting entities are unfamiliar or uncomfortable with new technologies, materials, or use of old technologies and materials in new and novel ways.

What does a 21st century Michigan look like?

Michigan's water supply, wastewater, and stormwater utilities embrace ideas, partnerships, and cost-effective emerging technologies and materials. This holds substantial promise for more efficient water and energy use, recovery of resources (such as nutrients), and improvement of environmental and public health outcomes.

How do we get there?

- 7.7.1** The MDEQ, municipalities, and local utilities should put in place a process to periodically review and update new technologies, procurement manuals, or standard operating practices to allow for open competition for technology and materials meeting relevant professional standards (e.g., American Water Works Association, Michigan Water Environment Association). Regulatory programs should be updated to further enable innovative approaches to achieve environmental and public health outcomes.

Estimated investment needed: Will utilize existing staff resources



- 7.7.2** The MDEQ, municipalities, and local utilities should put in place a process to periodically review and update regulatory programs, implement methods of continuous improvement, and create standard work to further enable innovative approaches to achieve environmental protection and public health outcomes, as well as to control costs.

Estimated investment needed: Will utilize existing staff resources

